

Claims

1. A toothbrush, comprising:

a brushhead portion having a bristle section in the vicinity of one end thereof;

a handle portion, with a driver assembly therein for driving the bristle section, wherein the brushhead portion and the handle portion are adapted such that the brushhead portion is removable from the handle portion;

communication means for data communication between the brushhead portion and the handle portion when the brushhead portion and handle portion are joined together;

a memory element in the brushhead portion for storing at least data which identifies the brushhead portion; and

a microcontroller in the handle portion, wherein the memory element in the brushhead portion provides information therein to the microcontroller via the communication means.

2. A toothbrush of claim 1, wherein the memory element is a read-only memory (ROM) device, and wherein the information stored in the memory includes an identification number associated with the brushhead, wherein the microcontroller in operation accumulates information concerning use of the brushhead, and wherein the apparatus includes means for reading the information in the memory element in the brushhead to the microcontroller.

3. A toothbrush of claim 1, wherein the memory element is a random access memory (RAM) device, and wherein information can be written to the RAM.

4. A toothbrush of claim 3, wherein the information is programming information for the operation of the toothbrush for the brushhead.

5. A toothbrush of claim 3, wherein the RAM can store information concerning use of the toothbrush.

6. A toothbrush of claim 1, wherein the toothbrush will not operate unless the information from the memory element is valid, as determined by the microcontroller.

7. A toothbrush of claim 1, including a brushhead storage element for temporarily storing a plurality of brushheads, wherein the brushhead storage element includes means for displaying selected information stored in the brushhead.

8. A toothbrush of claim 1, further including a programming device for providing programming information to a brushhead to define particular operations thereof.

9. A toothbrush of claim 1, wherein the communication means comprise electrically conductive elements, from the memory element and the microcontroller which interconnect as the brushhead is joined to the handle.

10. A toothbrush of claim 1, wherein the communication means comprise wireless components.

11. A toothbrush of claim 10, wherein the wireless components include coils on the brushhead and the handle for inductive communication.

12. A toothbrush of claim 10, wherein the wireless components include infrared transmission and receiver elements.

13. A toothbrush of claim 1, wherein the microcontroller includes means for comparing the actual use of the brushhead against a preselected use value and for providing an indication when the preselected value has been met, indicating that the brushhead should be replaced.

14. A brushhead portion of a toothbrush, the toothbrush including a handle portion to which the brushhead portion can be joined comprising:

a brushhead assembly which includes a bristle section, the brushhead assembly adapted to be removable from the handle portion of the toothbrush;

communication means for data communication between the brushhead assembly and a separate device; and

a memory element in the brushhead assembly for storing data identifying the brushhead assembly.

15. A brushhead of claim 14, wherein said separate device is the handle portion of the toothbrush.

16. A brushhead of claim 14, wherein the communication means includes means for data communication with the handle portion when the brushhead assembly and the handle are joined together.

17. A brushhead of claim 14, wherein the memory element is a read-only memory (ROM) device.

18. A brushhead of claim 14, wherein the memory element is a random access memory (RAM) device, wherein information can be written to the RAM.

19. A brushhead of claim 18, wherein the information is programming information for proper operation of the toothbrush relative to said brushhead assembly.

20. A brushhead of claim 14, wherein the communication means includes electrically conductive elements.

21. A brushhead of claim 15, wherein the communication means comprises wireless components.

22. A brushhead of claim 21, wherein the wireless components include coils for inductive communication.

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